

### **REMARKS**

Claims 1-8 are pending in the above-identified application.

In the Office Action of June 26, 2008, claims 1-8 were rejected. Claims 1 and 7 were also objected to due minor informalities.

With this Amendment, claims 1, 3, 5 and 7 were amended to correct the minor grammar informalities and typo graphical errors. Claim 5 was further amended to remove unnecessary limitations and alternative clarifying limitations. Accordingly, claims 1-8 remain at issue.

#### **I. Objection To Claims 1 and 7**

The Examiner objected to claims 1 and 7 due to three typographical errors.

Applicants have amended claims 1 and 7 to correct the minor informalities noted by the Examiner. Accordingly, Applicants respectfully request that this objection to these claims be withdrawn.

#### **II. 35 U.S.C. § 102 Anticipation Rejection of Claims**

Claims 1-8 were rejected under 35 U.S.C. § 102(b) as being purportedly anticipated by *Kato et al.*, US 5,877,715 (“*Kato*”). Applicants respectfully traverse this rejection.

Independent claim 1 is directed to a method of making a master for manufacturing an optical disc that requires, in relevant part:

“an exposing step of applying a laser beam for recording, modulated by an information signal corresponding to an information signal of an information concave and convex pattern to be formed on said optical disc, to an inorganic

resist layer of said master formed on a substrate to form an exposed pattern corresponding to said information concave and convex pattern of said optical disc...” (emphasis added)

Applicants teach using an inorganic resist layer (that preferably comprises “incomplete oxide of transition metals as claimed in claim 2) to form the master in order to make it “possible to record a signal pattern [in the inorganic resist layer] utilizing the change in the chemical state of the inorganic resist materials. (See, Original Specification, at pg. 16, line 11 - pg. 17, line 5).

*Kato* discloses producing “a master disk” for forming a “stamper” that is used to form a “supporting substrate used in the [optical recording] medium” taught by *Kato*. (See, *Kato*, Abstract, [0044]-[0045]). To form the “master disk,” *Kato* teaches forming “a positive resist layer...on the surface of a highly rigid substrate such as a glass substrate” and exposing the resist layer using “only one beam, and this beam is irradiated intermittently by on/off modulation.” (See, *Kato*, [0045]-[0046]). *Kato* teaches that the resist layer used to produce the master disk is “common with the conventional procedure of manufacturing a master disk,” in which the resist layer comprises a common photoresist material. (See, *Kato*, [0007], [0045]). However, nowhere does *Kato* teach or fairly suggest that the resist layer used to produce the master disk is an “inorganic resist layer” as required by claim 1.

The Examiner points to paragraph [0043] of *Kato* for support that *Kato* teaches forming the master disk using an inorganic resist layer. However, this portion of *Kato* simply indicates that the “supporting substrate” of the optical disk (which has already been formed from a stamper produced from a master disk) may have a “light-transmitting layer” formed over the “recording layer” of the optical disk to “protect the recording layer” of the optical disk. (See,

*Kato*, [0043]). *Kato* further teaches that this “light-transmitting layer” that protects the recording layer of the optical disk may be a “resin layer” or be “constituted from an inorganic material.” However, nowhere does *Kato* teach or fairly suggest that this light-transmitting layer is used as a resist layer for the optical or for forming the master disk.

Independent claim 1 also requires, in relevant part, that:

“in said exposing step, a laser beam for estimation is applied to a predetermined area on said inorganic resist layer to estimate information signal characteristics of said exposed pattern of said inorganic resist layer using reflected light of the laser beam for estimation, and power of said laser beam for recording is controlled based on the estimated result.”

Support for this limitation may be found in the Original Specification, at least on pg. 19, lines 1-24; pg. 20, line 27 - pg. 21, line 10, pg. 23, line 10 - pg. 26, line 12).

The Examiner points to paragraphs [0047]-[0073] of *Kato* for support that *Kato* teaches this limitation for estimating information signal characteristics of the exposed pattern of the inorganic resist layer of the master disk during the exposing step for forming the master disk. However, this portion of *Kato* simply indicates that, after an optical disk is formed in accordance with the *Kato*’s master disk, pit modulation and AR characteristics of the optical disk are observed using “an optical recording medium evaluator” that includes a laser beam. Nowhere does *Kato* teach, while exposing a pattern on an inorganic resist layer of a master, using a laser beam for estimating information signal characteristics of the exposed pattern of the inorganic resist layer.”

*Kato* also fails to teach or suggest that the “power of [the] laser beam for recording [,that is used to expose the pattern on the inorganic resist layer of the master,] is controlled based on the estimated result.”

Accordingly, for at least each of the foregoing reasons, Applicants submit that *Kato* fails to teach or fairly suggest all the limitations of claim 1 and respectfully requests that this rejection of claim 1 be withdrawn.

Claims 1-6 depend directly or indirectly from claim 1 and, thus, should be deemed allowable for at least the same reasons as provided for claim 1.

Independent claim 7 is directed to a method for manufacturing an optical disc comprising steps for forming a master similar to claim 1. Thus, Applicants submit that claim 7 and claim 8 that depends from claim 7 should also be deemed allowable for at least the same reasons as given for claim 1.

### **III. Conclusion**

In view of the above amendments and remarks, Applicant submits that all pending claims 1-8 are clearly allowable over the cited prior art, and respectfully requests early and favorable notification to that effect.

The Commissioner is hereby authorized to charge any additional fees which may be required, to Account No. 19-3140.

Response to June 26, 2008 Office Action  
Application No. 10/502,038

Respectfully submitted,

Dated: October 17, 2008

By: /Thomas J. Burton/  
Thomas J. Burton  
Registration No. 47,464  
SONNENSCHNEIDER NATH & ROSENTHAL LLP  
P.O. Box 061080  
Wacker Drive Station, Sears Tower  
Chicago, Illinois 60606-1080  
(312) 876-8000

14753969\V-1